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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/240,919	01/29/1999	ALEX E. HENDERSON	3625	7950

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EXAMINER

PATEL, AJIT

ART UNIT	PAPER NUMBER
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2664

DATE MAILED: 03/29/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/240,919

Applicant(s)

HENDERSON ET AL.

Examiner

AJIT G. PATEL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) 1-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 29-71 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1,2,5,7.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

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1. Restriction to one of the following inventions is required under 35 U.S.C.

121:

I. Claims 1-28 are drawn to filtering input data, classified in class 707, subclass 3.

II. Claims 29-71 are drawn to filtering the packets, classified in class 370, subclass 392.

The inventions are distinct, each from the other because of the following reasons:

The above inventions are separate, distinct, and independent. Neither requires other for its implementation, they have separate statuses in the art as shown by their different classification. Each invention, if allowable, would be capable for supporting a separate patent. Therefore, restriction for examination purposes is proper.

During a telephone conversation with Mr. Ed Taylor on 2/12/04 a provisional election was made without traverse to prosecute the invention of filtering the packets, claims 29-71. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-28 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship

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must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 29-32,35-39,41-49,55,56,59,63 are rejected under 35 U.S.C. 102(e) as being anticipated by Adams et al (5,761,424).

Regarding claims 29,37,46,55-56,59,63, Adams et al disclose a method and apparatus for automating the filtration and generation of information in a packetized communication system comprises a filtering database for storing at least one rule table, the at least one rule table comprising a protocol element

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locator and a default rule (lines 5-10, col.2; lines 52-66, col.5); and a packet filtering engine coupled to the filtering database for filtering the packets using the at least one rule table in the filtering database (col. 4, line 66 through line 11, col.5); wherein the system is coupled to receive a packet prototype for determining a location to be modified in the filtering database (col. 4, line 66 through line 11, col.5).

Regarding claims 30,46, Adams et al disclose the limitation "the filtering database comprises layered of rule tables (lines 17-25, col. 6).

Regarding claims 31,38, Adams et al disclose the limitation "the at least one rule table further comprises at least one filtering rule" (lines 17-25, col. 6).

Regarding claims 32,39, Adams et al disclose the limitation "the at least one filtering rule comprises a statistics counter" (510,512 of fig.5).

Regarding claims 35,41, Adams et al disclose a packet buffer for storing packet (108 of fig.1); a protocol element locator buffer for storing the protocol element locator (102 of fig. 1); and a rule evaluator for receiving the packet from the packet buffer and applying the at least one rule table to the packet (106,108 of fig. 1).

Regarding claims 36,49 Adams et al disclose the limitation "the packet filtering engine is coupled to receive a packet prototype modifying the filtering database (lines 24-35, col. 4).

Regarding claim 42, Adams et al disclose the limitation "the rule evaluator uses the protocol element locator to select a protocol element from the packet (lines 4-7, col. 5).

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Regarding claim 43, see the previous rejection for claims 41 and 42.

Regarding claim 44,48, Adams et al disclose the limitation "the at least one rule table comprises at least one filtering rule and at least one default rule to be applied to the protocol element indicated by the protocol element locator" (lines 5-10, col. 2).

Regarding claim 47, see the rejection applied for claims 35,37,43.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 50-54,57,58,64-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al in view of Lakshman et al.

Regarding claims 50,51,54,65-71, Adams et al disclose all the claimed limitation as described in previous paragraph. The step of comparing the selected protocol element to the filtering rule of Adam et al (see col.5, line 59-line 16, col. 6) do not have upper bound and the lower bound range. Lakshman et al disclose a packet filter system comprising filtering rule having the upper bound and the lower bound range (col. 3, line 31 through line 47, col.4).

Therefore, it would have been obvious to one skilled in the art to use filtering rule having upper bound and lower bound range as taught by Lakshman et al in the

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system of Adams et al to perform the filtering function at high speeds for maintaining a great level of throughput.

Regarding claims 52,53,57,58,64 Adams et al does not specifically disclose the step of determining whether the selected protocol element is less than or equal to the upper bound and determining whether the selected protocol element is greater than or equal to the lower bound. Lakshman et al disclose the limitation "determining whether the selected protocol element is less than or equal to the upper bound and determining whether the selected protocol element is greater than or equal to the lower bound" (lines 31-56, col.3 which imply that the IP address is in the range of less than or equal to the upper bound and greater than equal to the lower bound; lines 48-66, col.4). Therefore, it would have been obvious to one skilled in the art to use step of determining whether the selected protocol element is less than or equal to the upper bound and determining whether the selected protocol element is greater than or equal to the lower bound as taught by Lakshman et al in the system of Adams et al to perform the filtering function at high speeds for maintaining a great level of throughput.

Regarding claims 70 and 71, Adams et al does not specifically disclose adding or deleting a filtering rule. Lakshman et al disclose adding or deleting a filtering rule (lines 28-47, col.4). Therefore, it would have been obvious to one skilled in the art to add or delete the filtering rule in the data base as taught by Lakshman et al in the system of Adams in order to make the data base up to date.

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6. Claims 60,61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spinney (5,414,704).

Regarding claim 60, Spinney discloses address lookup in packet communication network comprising a packet data interface for receiving a packet (10 of fig. 1A); and a parallel filtering database coupled to the packet data interface, the parallel filtering database comprising a parallel filtering database entry (lines 43-47, col. 16).

Regarding claim 61, Spinney discloses CAM, filtering rule storage and an associated data (23,21,10 of fig.1A).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spinney in view of Lakshman et al.

Regarding claim 62, Spinney does not specifically disclose the limitation "a packet prototype for modifying the parallel filtering database". Lakshman et al disclose the limitation "a packet prototype for modifying the parallel filtering database"

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9. Claims 33,34,40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al in view of Noll et al (US2002/0010793).

Regarding claims 33,34,40, Adams et al disclose all the claimed limitation except an offset, a mask, a table timer and statistics counters. Noll et al disclose a filtering system in a packet network comprises and statistics counters (para. 0043; page 24). Therefore, it would have been obvious to one skilled in the art to use an offset, a mask, a table timer and statistics counters in the filtering system as taught by Noll et al in the system of Adams et al in order to increase the processing speed.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AJIT G. PATEL whose telephone number is 703-308-5347. The examiner can normally be reached on MONDAY-THURSDAY.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AP


Ajit Patel
Primary Examiner